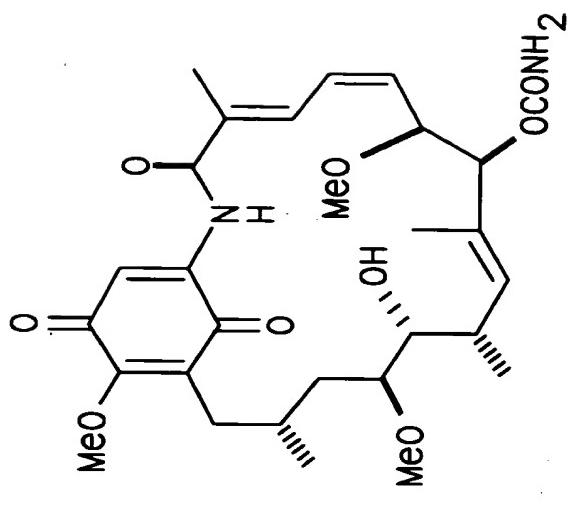
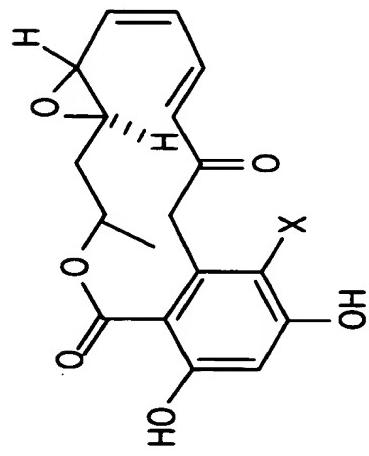


FIG. 1

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Geldanamycin (3)



X=Cl Radicicol (1)

X=H Monocillin I (2)

FIG. 2

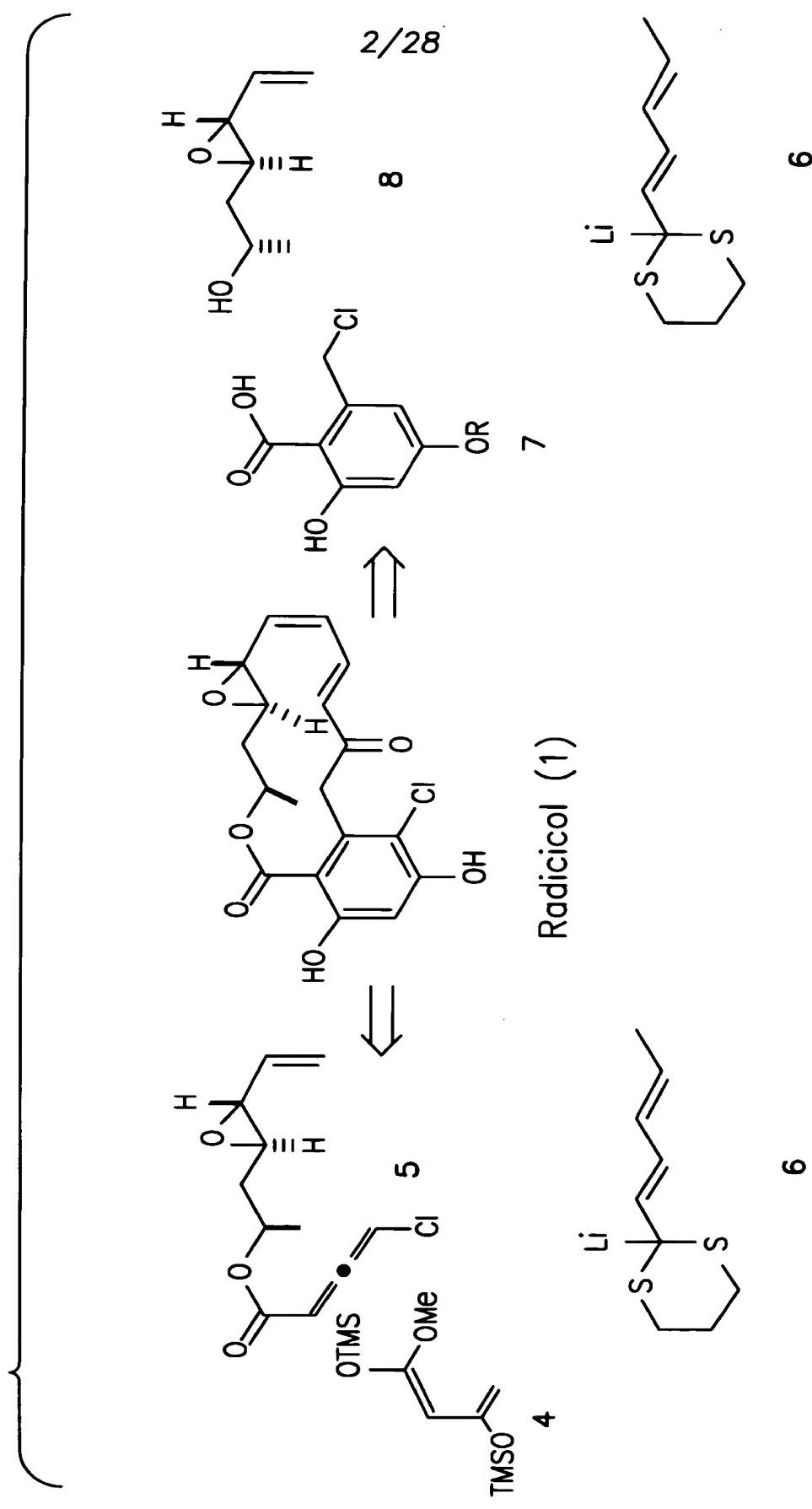
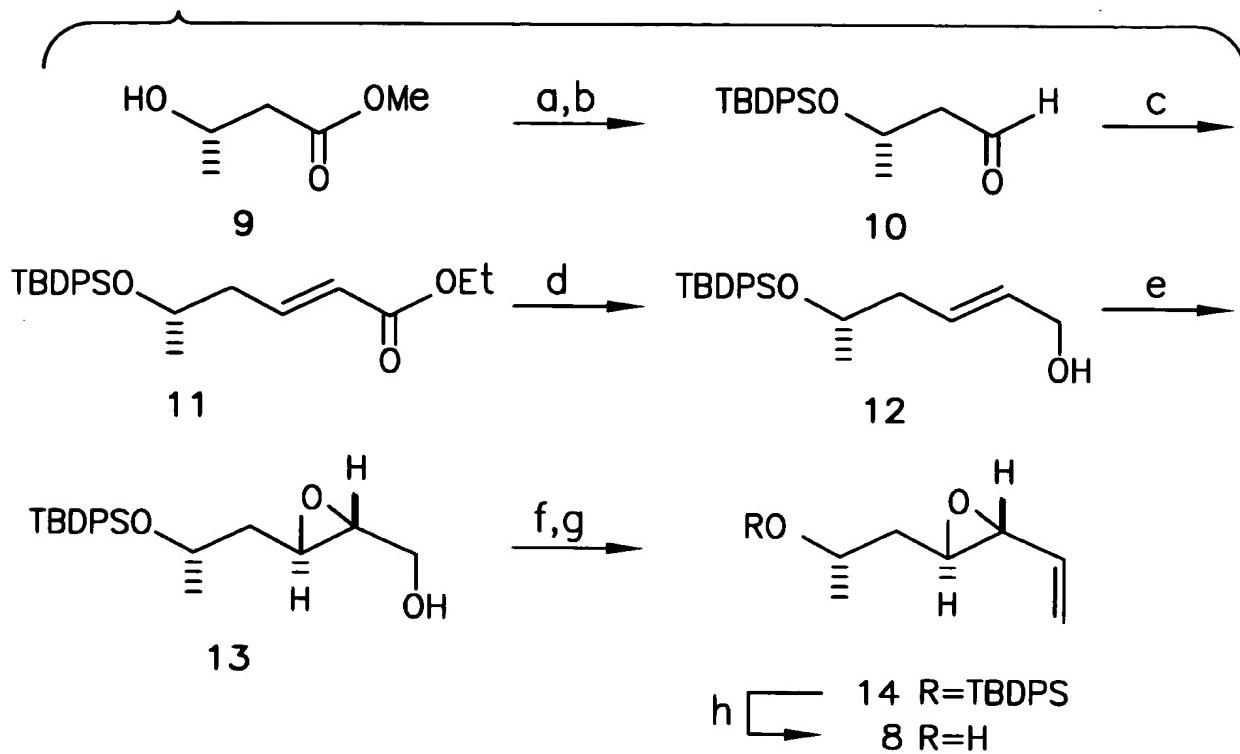


FIG. 3

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- (a) TBDPSCI, imid., >95%; (b) DIBAL-H, -78 °C, 92%;
 - (c) LiCl, DIPEA ($\text{EtO}_2\text{P(O)CH}_2\text{CO}_2\text{Et}$), 95%;
 - (d) DIBAL-H, -20 °C, 96%; (e) (+)-DET, $\text{Ti}(\text{O}i\text{Pr})_4$, TBHP, 90%, >95% ee;
 - (f) SO_3^* pyridine, Et_3N , DMSO, 90%;
 - (g) $\text{PH}_3\text{PCH}_3\text{Br}$, NaHMDS, 0 °C, 82%; (h) TBAF, 89%.

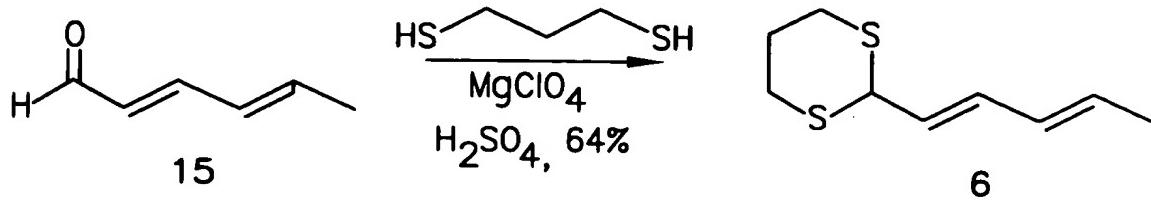


FIG. 4

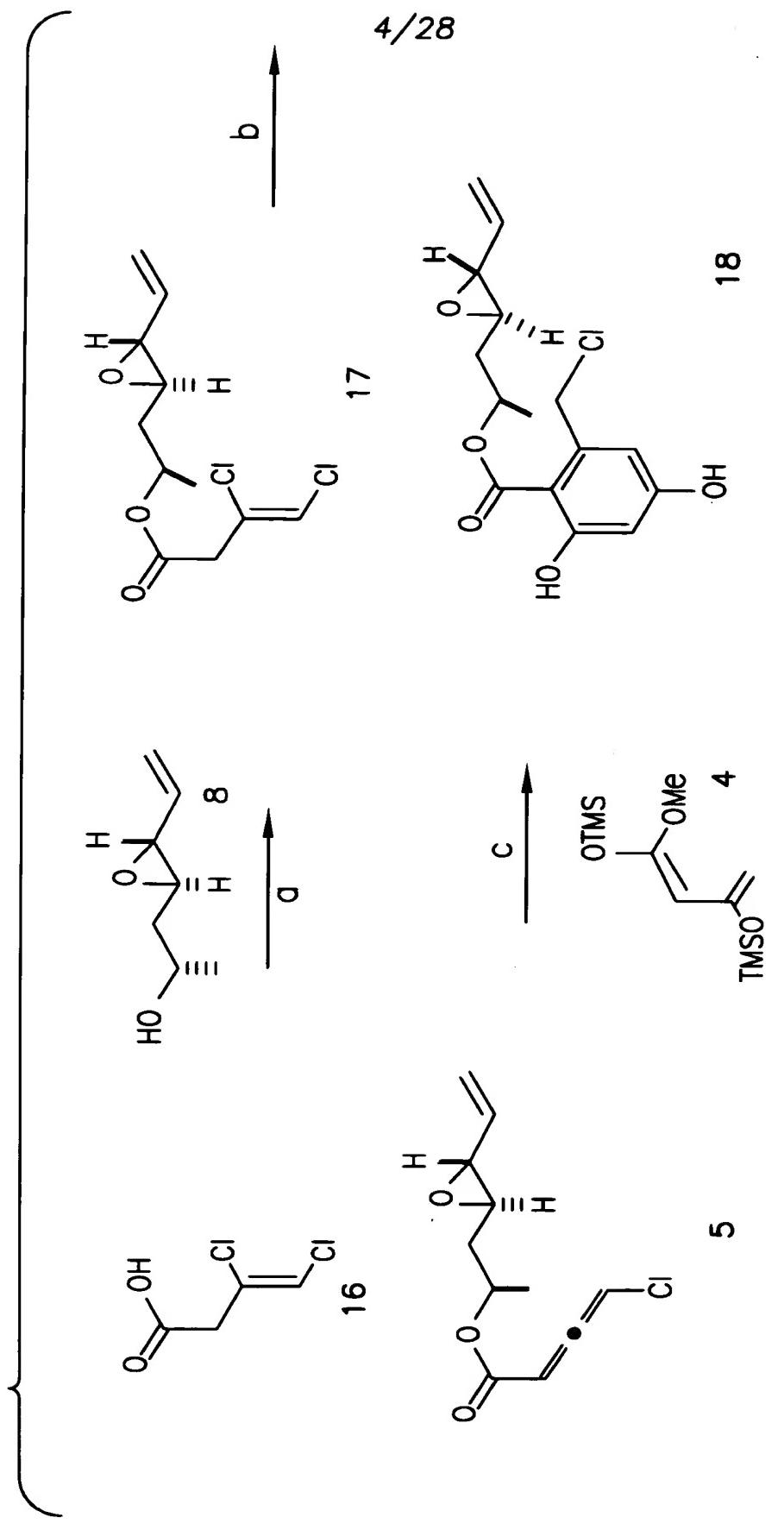
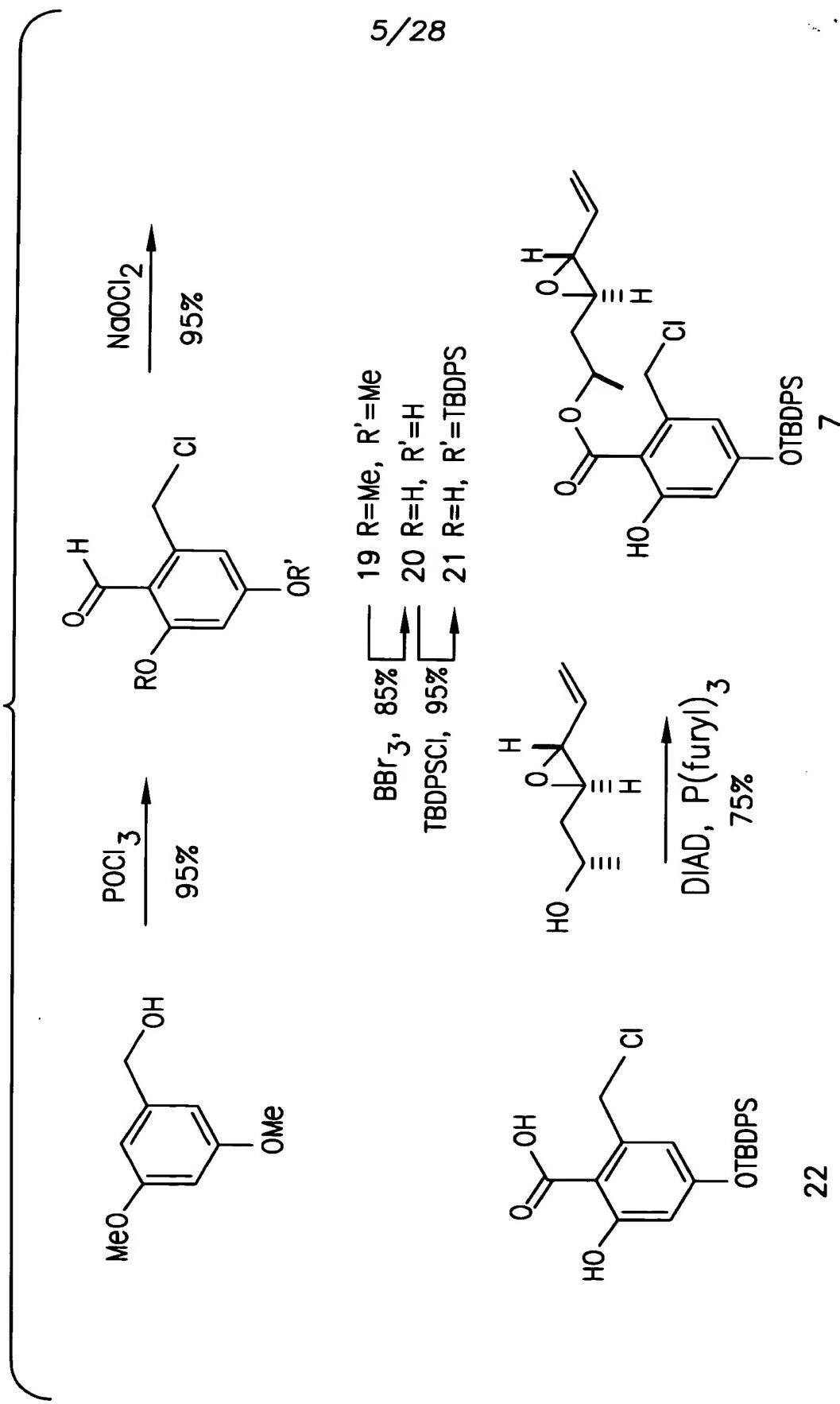
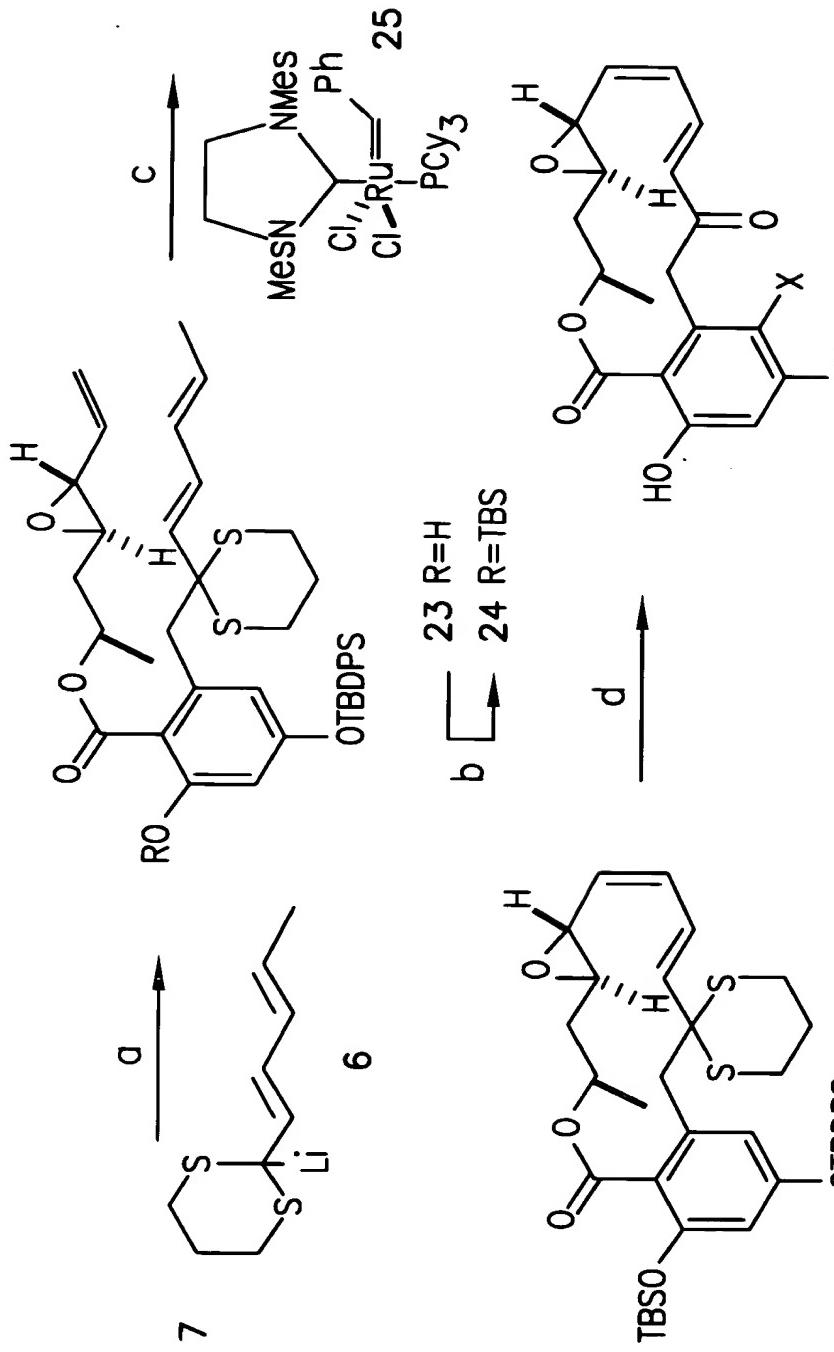


FIG. 5



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FIG. 6



- a. $n\text{-BuLi}$, -78°C , 50% (6:1); b. TBSCl , 83%; c. 42°C , 70%; d. (i) $m\text{CPBA}$,
(ii) Ac_2O , Et_3N , H_2O , 60°C , (iii) NaHCO_3 , MeOH , 60%; e. SO_2Cl_2 , 50%

FIG. 7

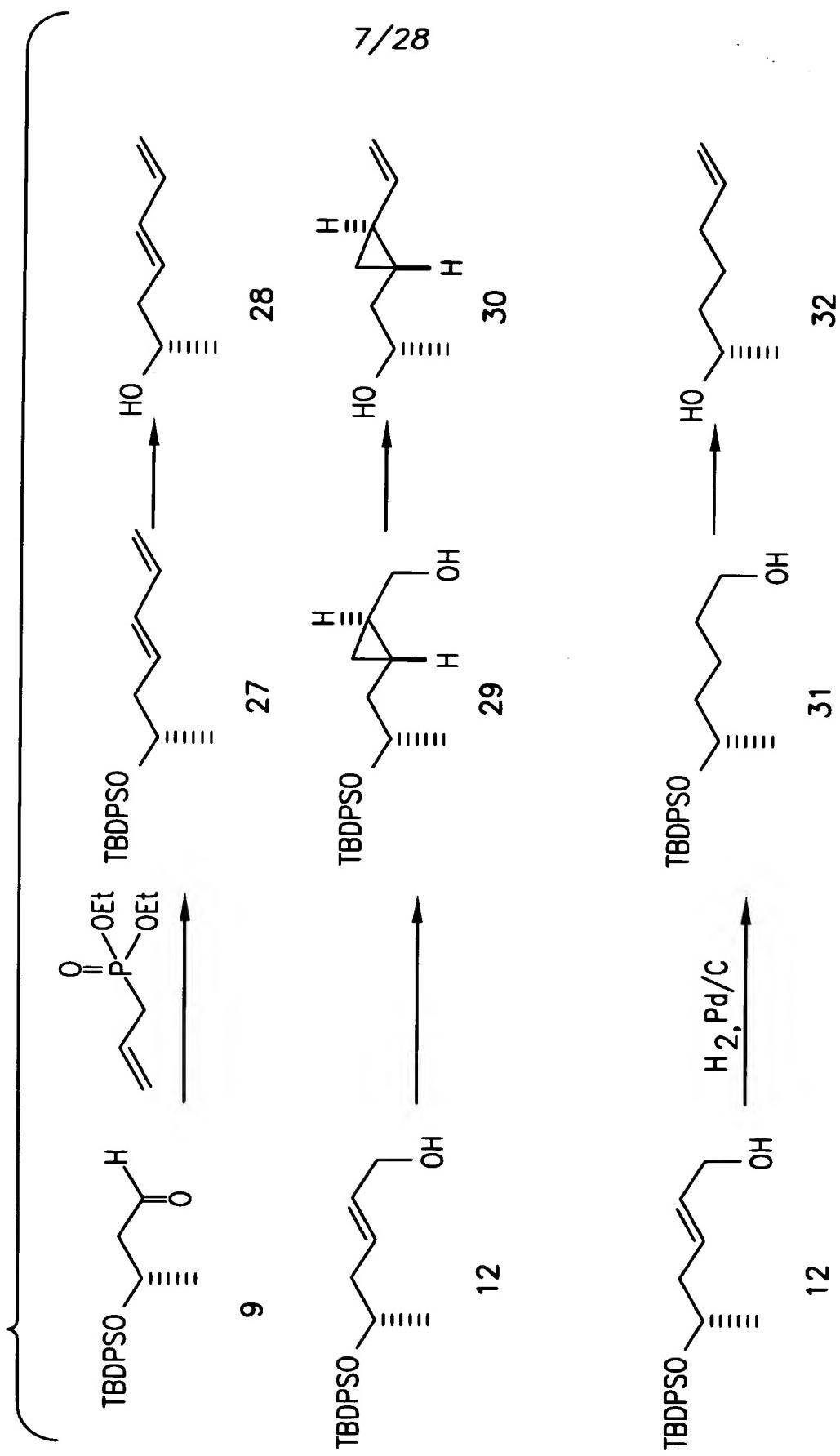


FIG. 8

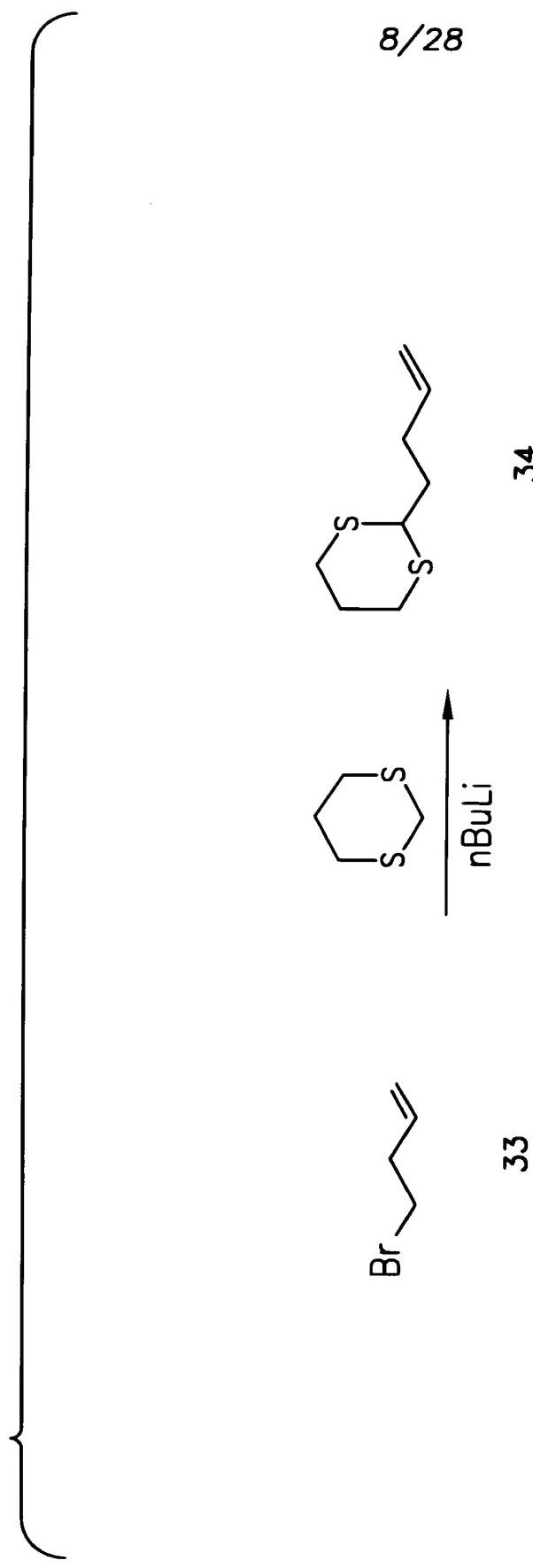


FIG. 9

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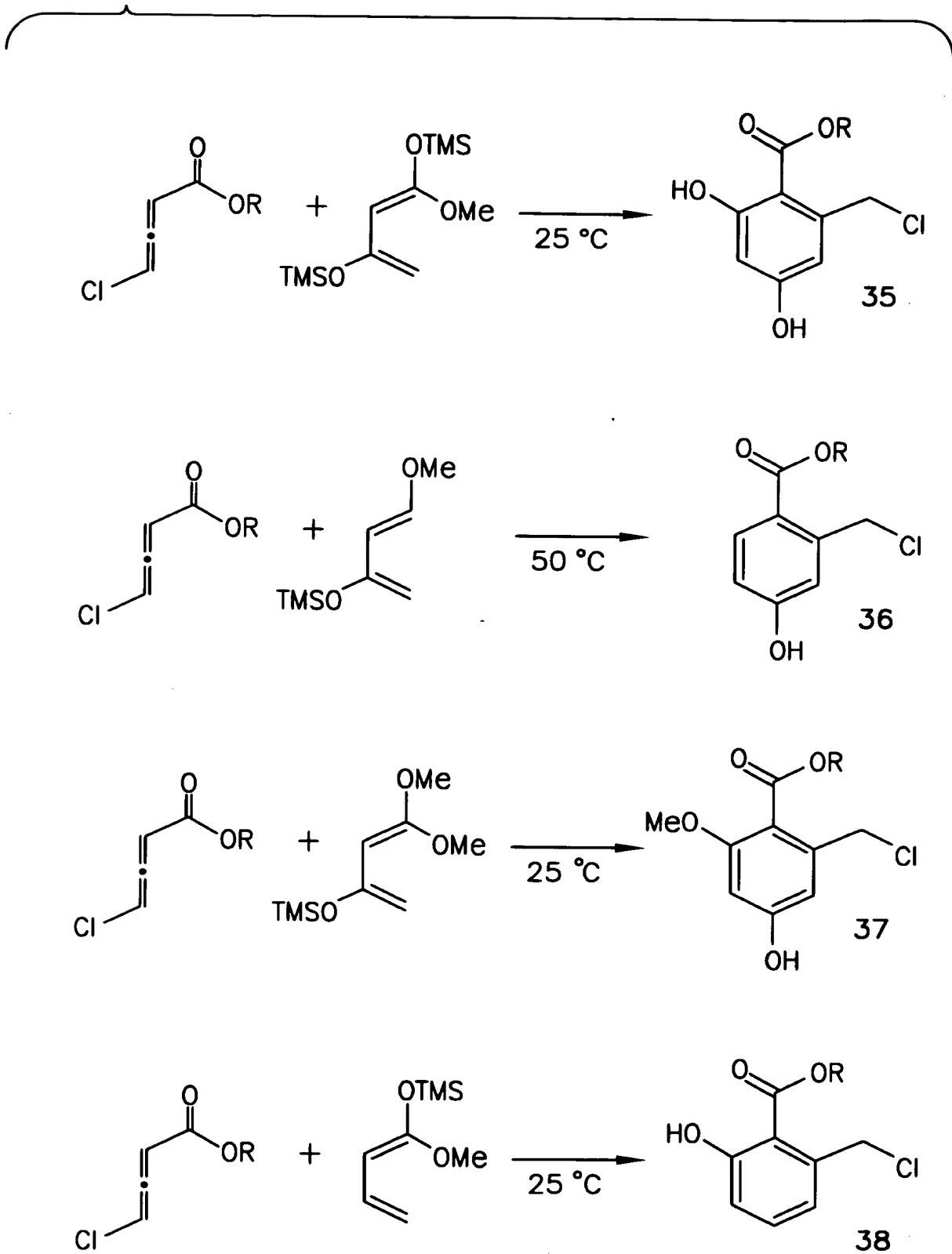


FIG. 10

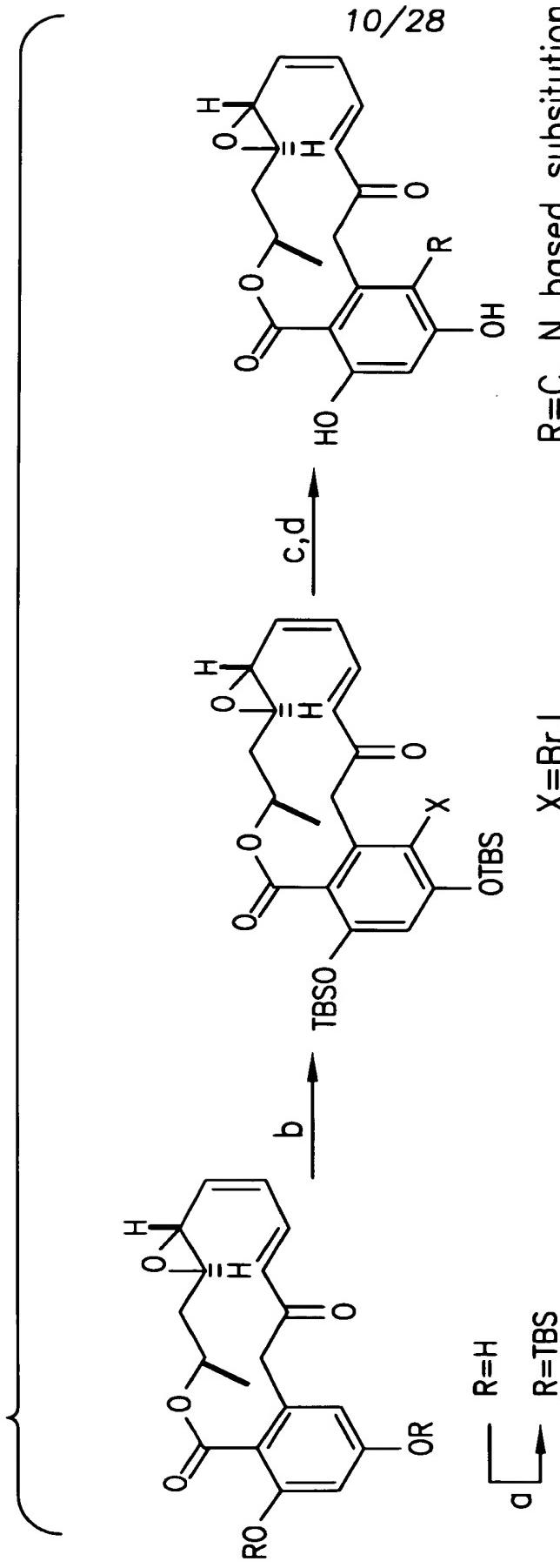
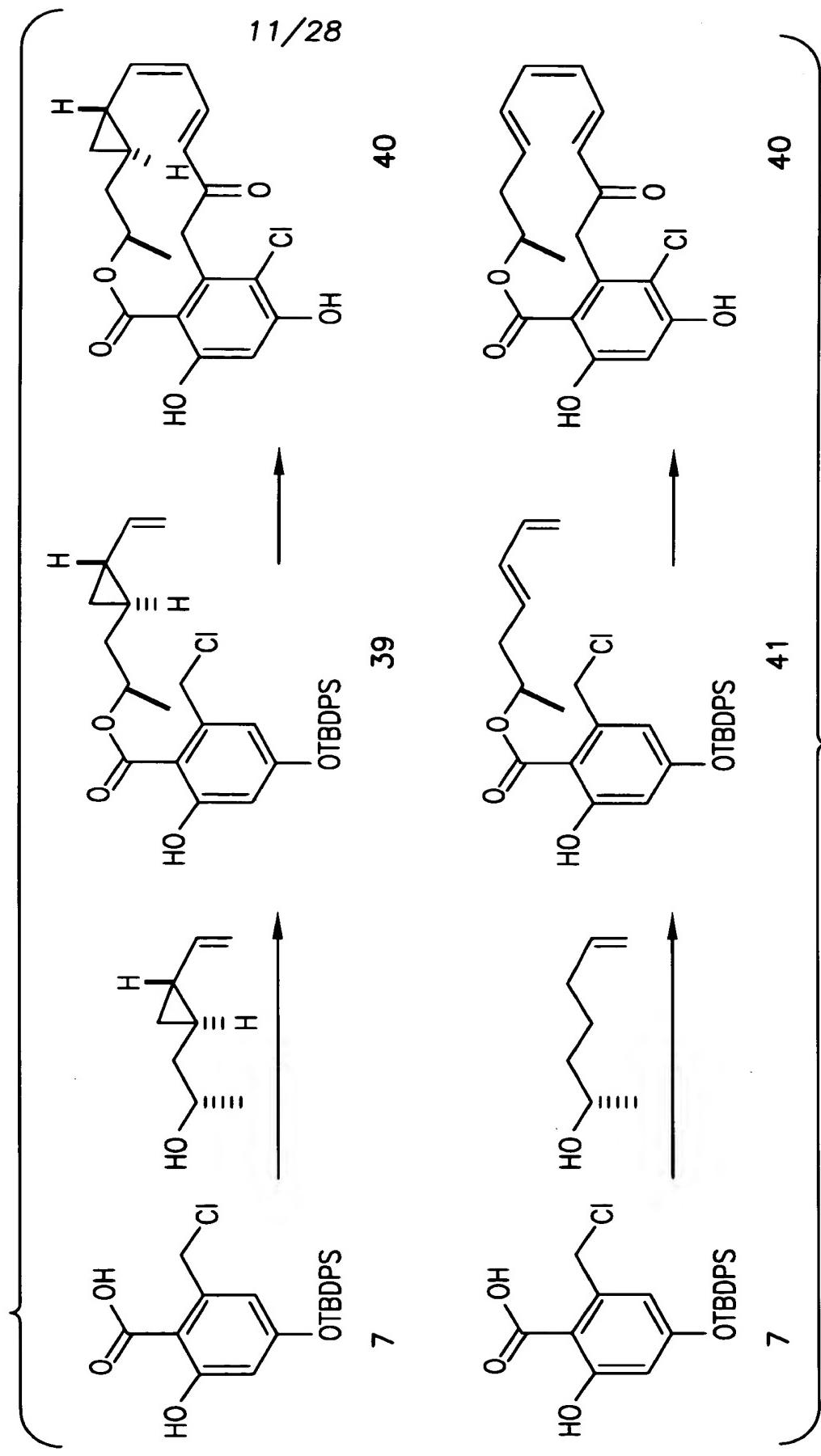


FIG. 11-1



FROM FIG. 11-1

FIG. 11-2

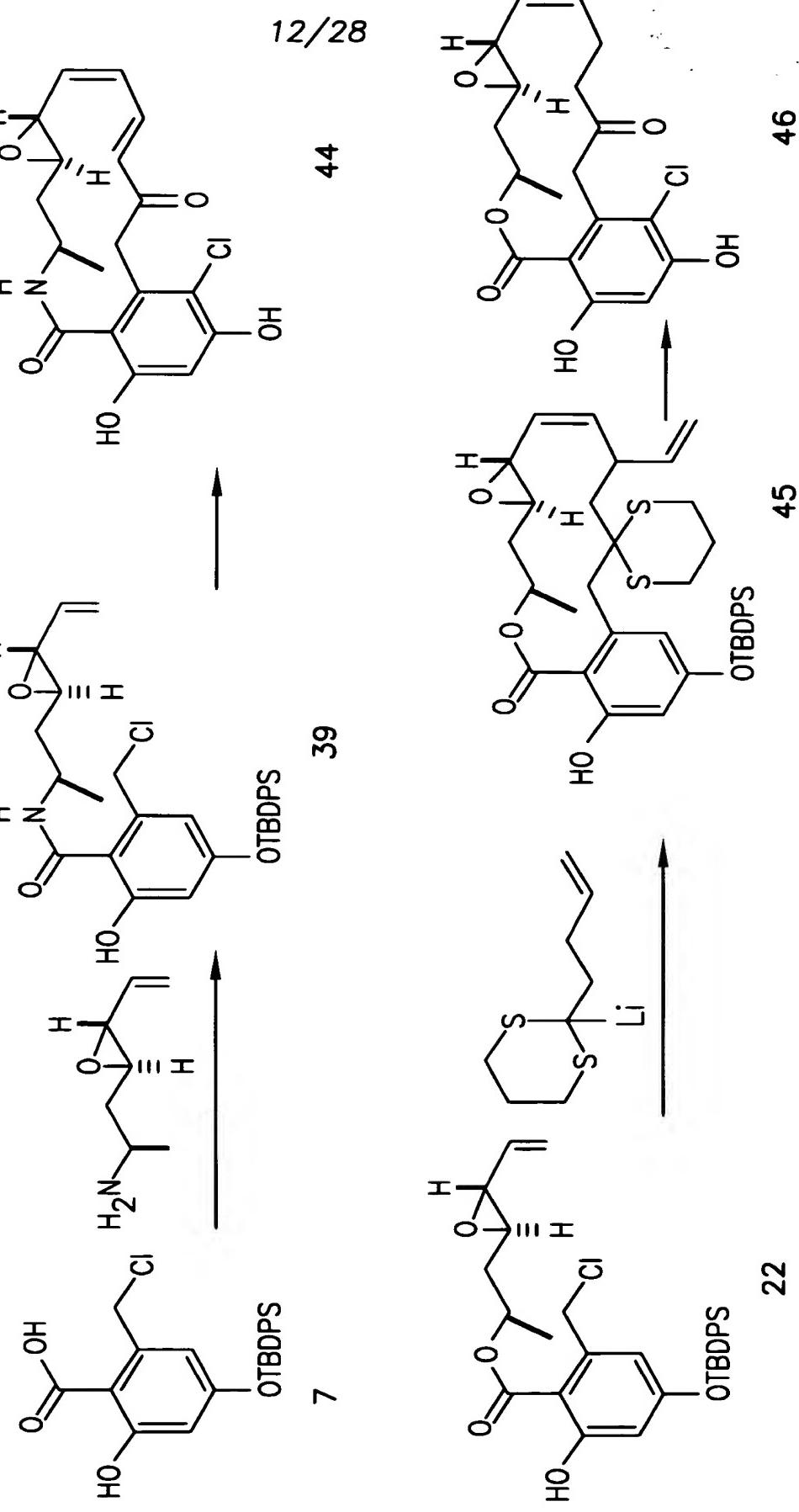


FIG. 12-1

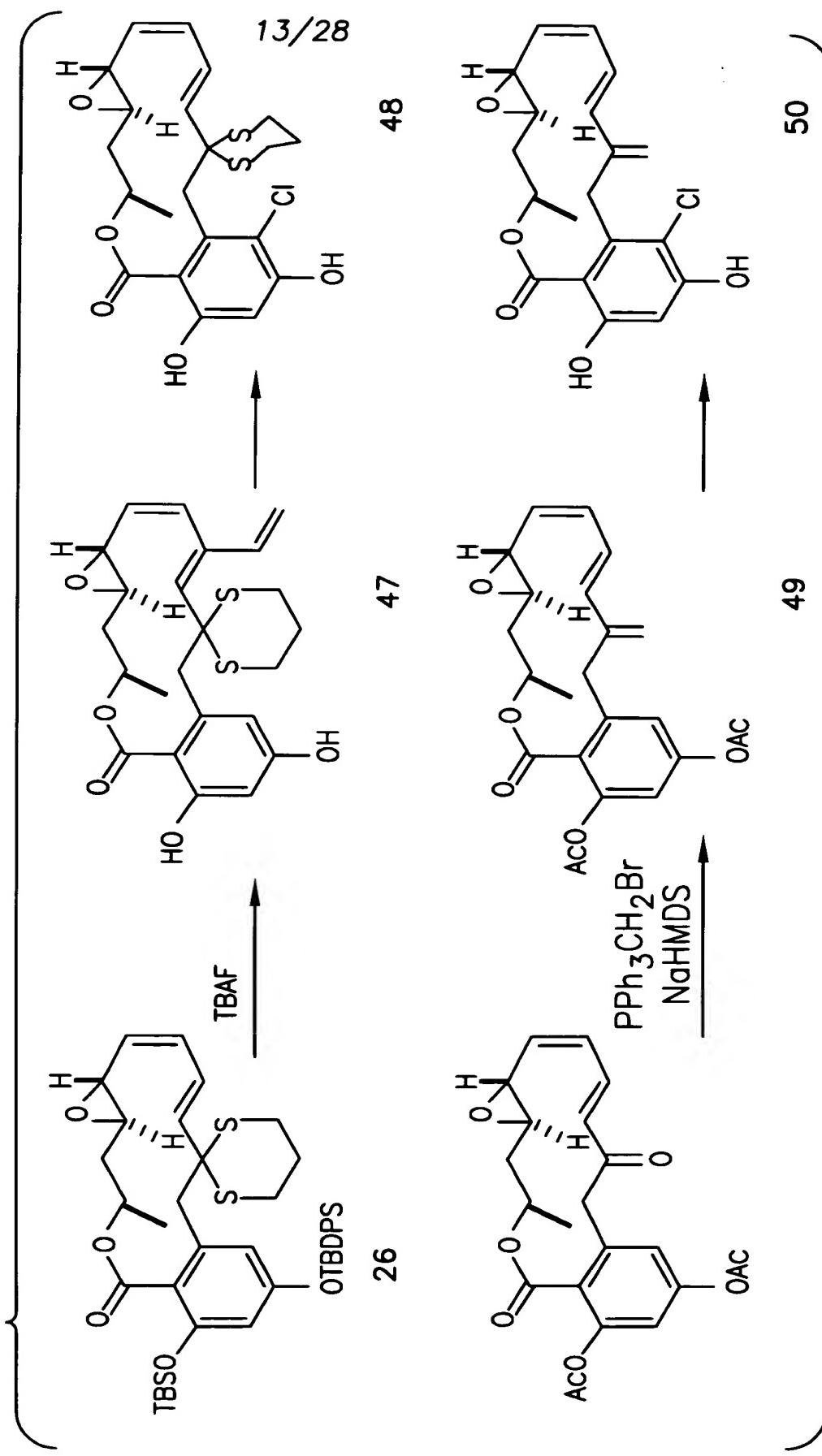


FIG. 12-2

FROM FIG. 12-1

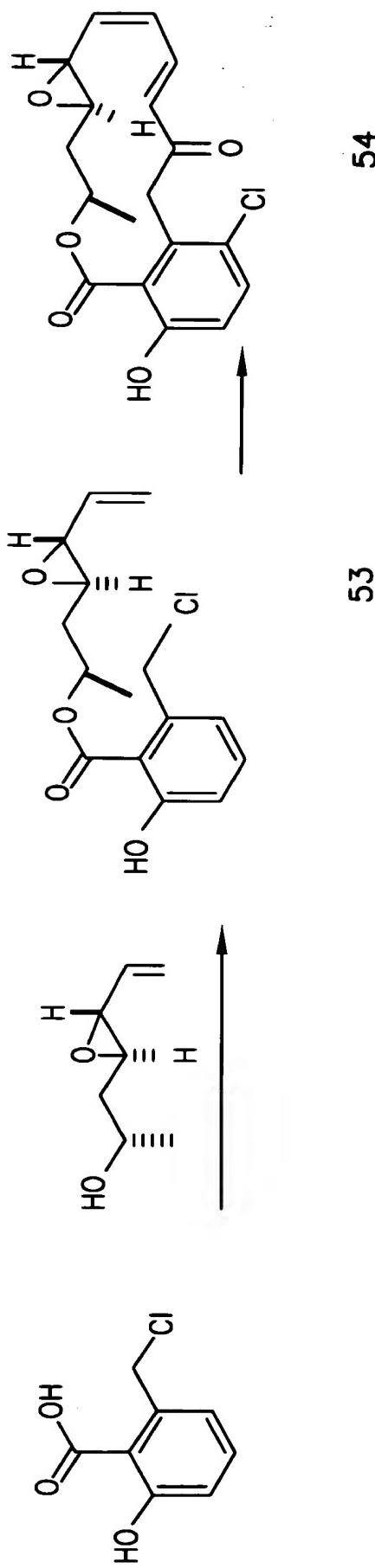
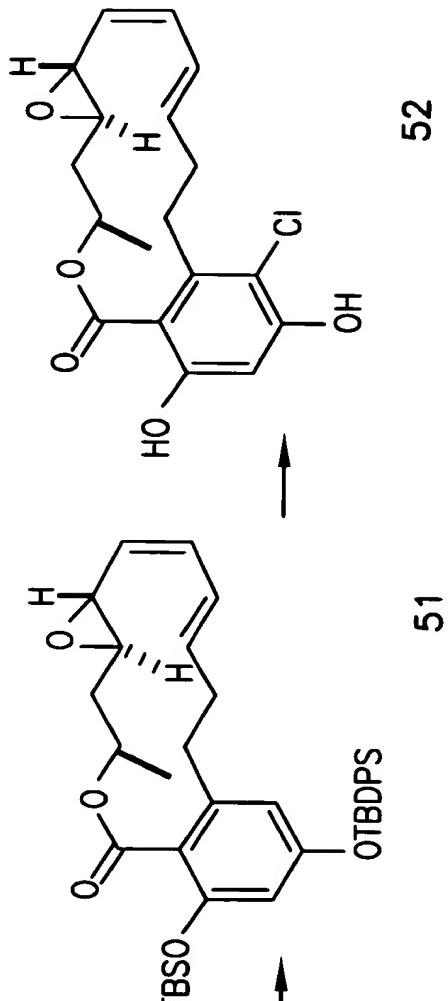
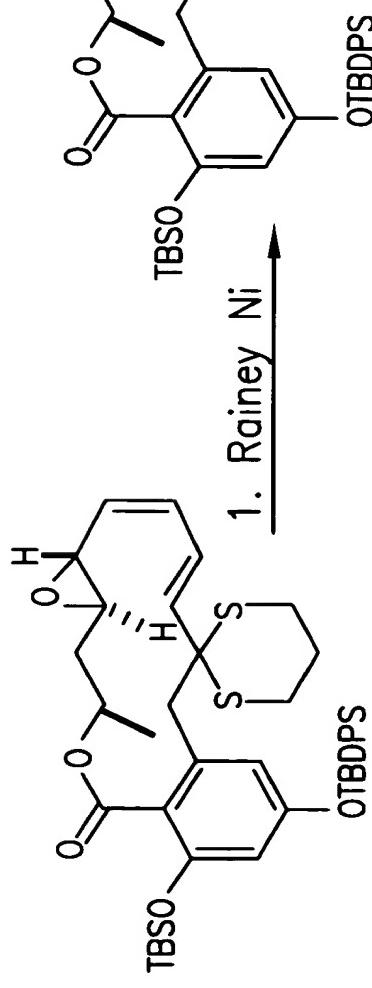
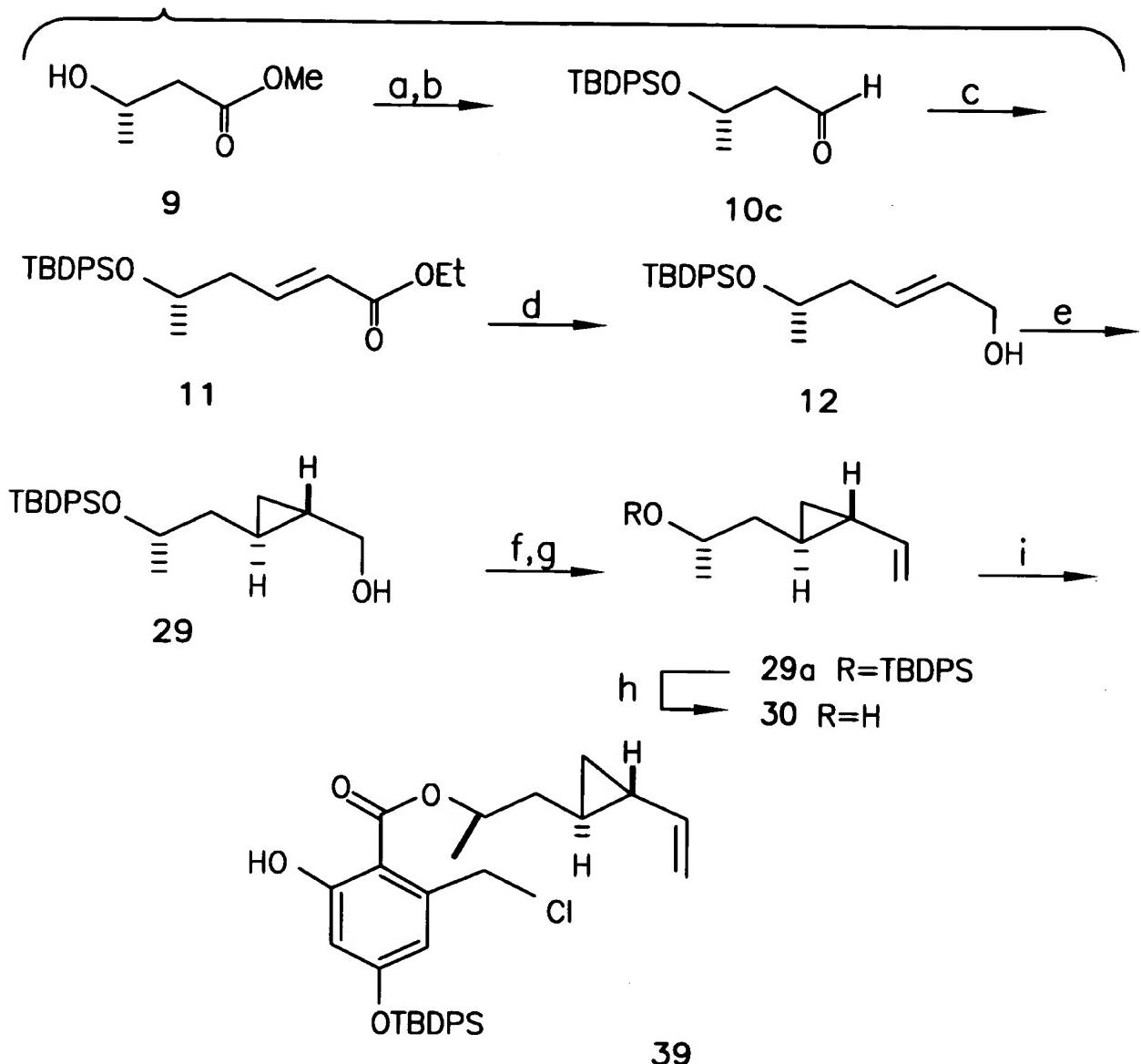


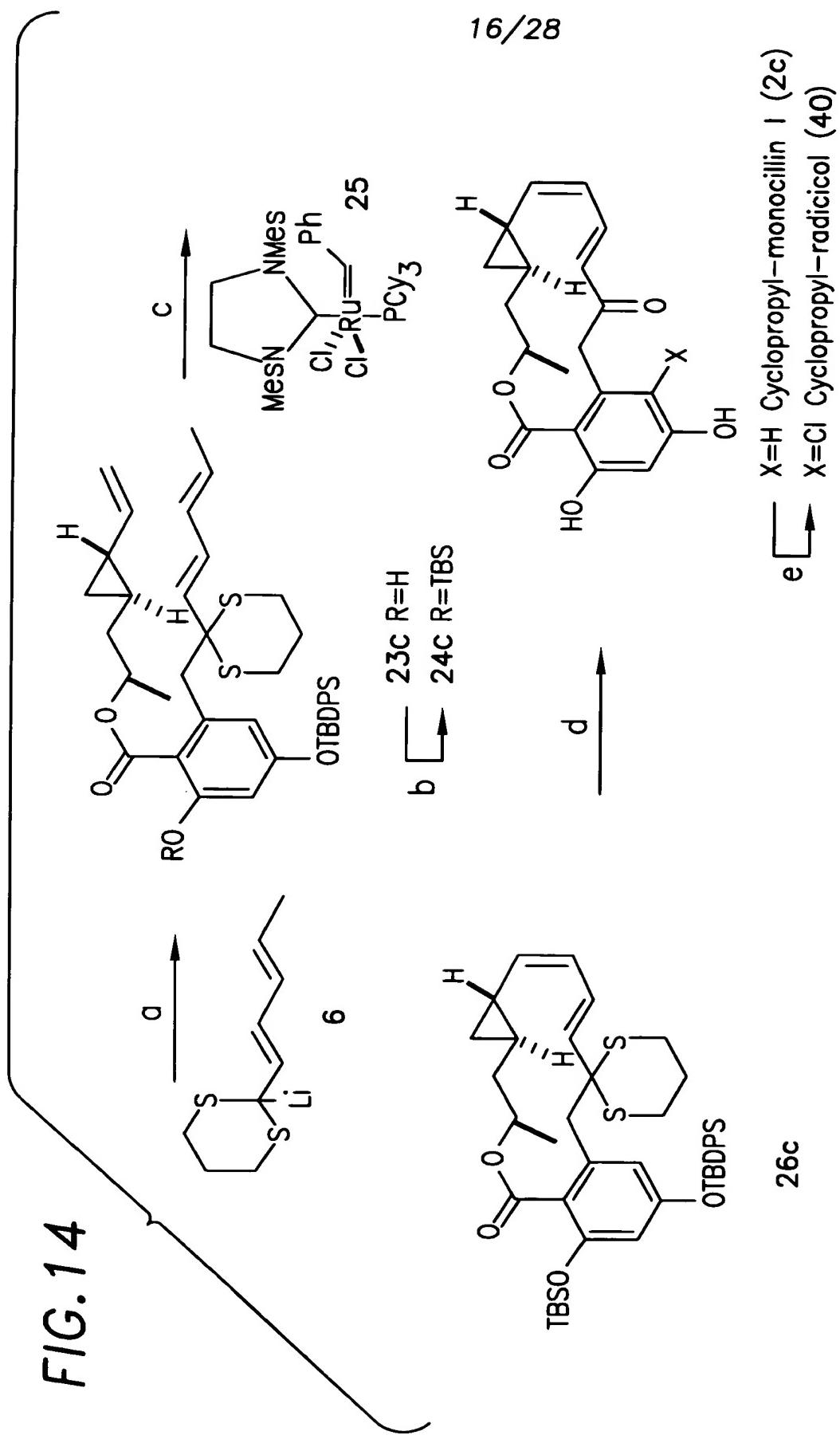
FIG. 13

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- ^a (a) TBDPSCl, imid., >95%; (b) DIBAL-H, -78 °C, 92%;
 (c) LiCl, DIPEA $(EtO)_2P(O)CH_2CO_2Et$, 95%; (d) DIBAL-H
 -20 °C, 96%; (e) (+)-tetramethyltartaric acid diamide-BBu,
 Et_2Zn , CH_2I_2 , 9 >95% ee; (f) SO_3^* pyridine, Et_3N ,
 DMSO, 90%; (g) $Ph_3PCH_2NaHMDS$,
 0 °C, 82%; (h) TBAF, 89%;
 (i) 7, $P(furyl)_3$, DIA benzene, 60%

FIG. 14



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- a. $n\text{-BuLi}$, -78°C , 75% (3:1); b. TBSCl , 83%; c. 42°C , 20%; d. (i) mCPBA,
 (ii) Ac_2O , Et_3N , H_2O , 60°C , (iii) NaHCO_3 , MeOH , 60%; e. SO_2Cl_2 , 80%

FIG. 15-1

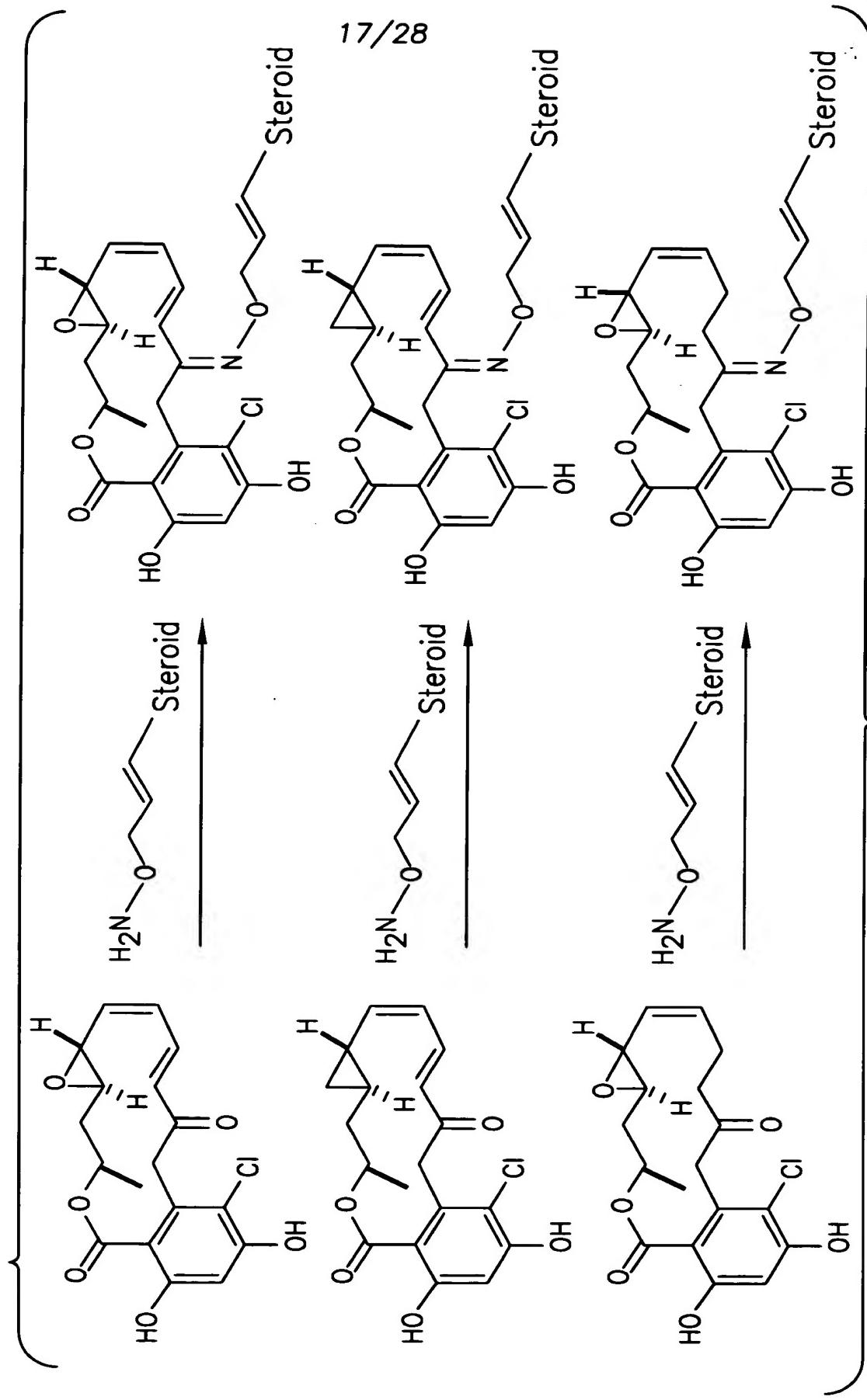
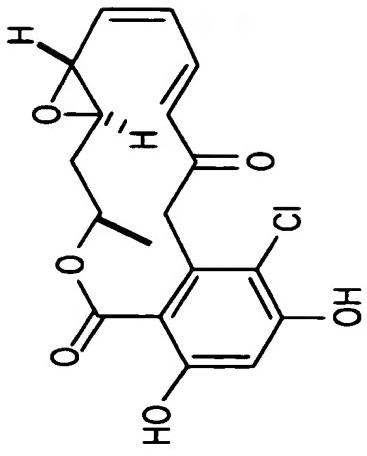
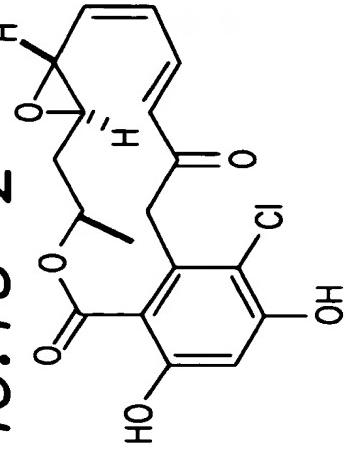
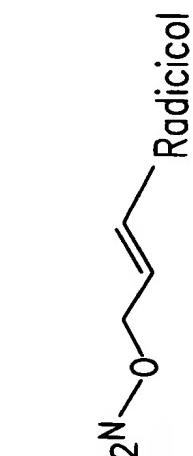


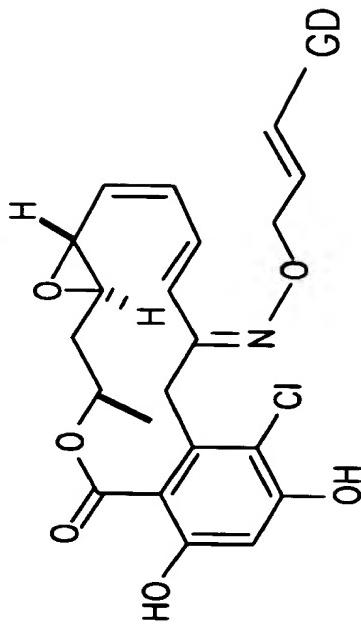
FIG. 15-2



FROM FIG. 15-1



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GD=Geldanamycin

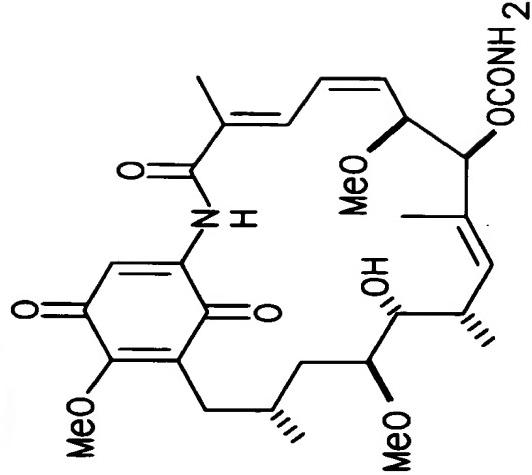


FIG. 16-1

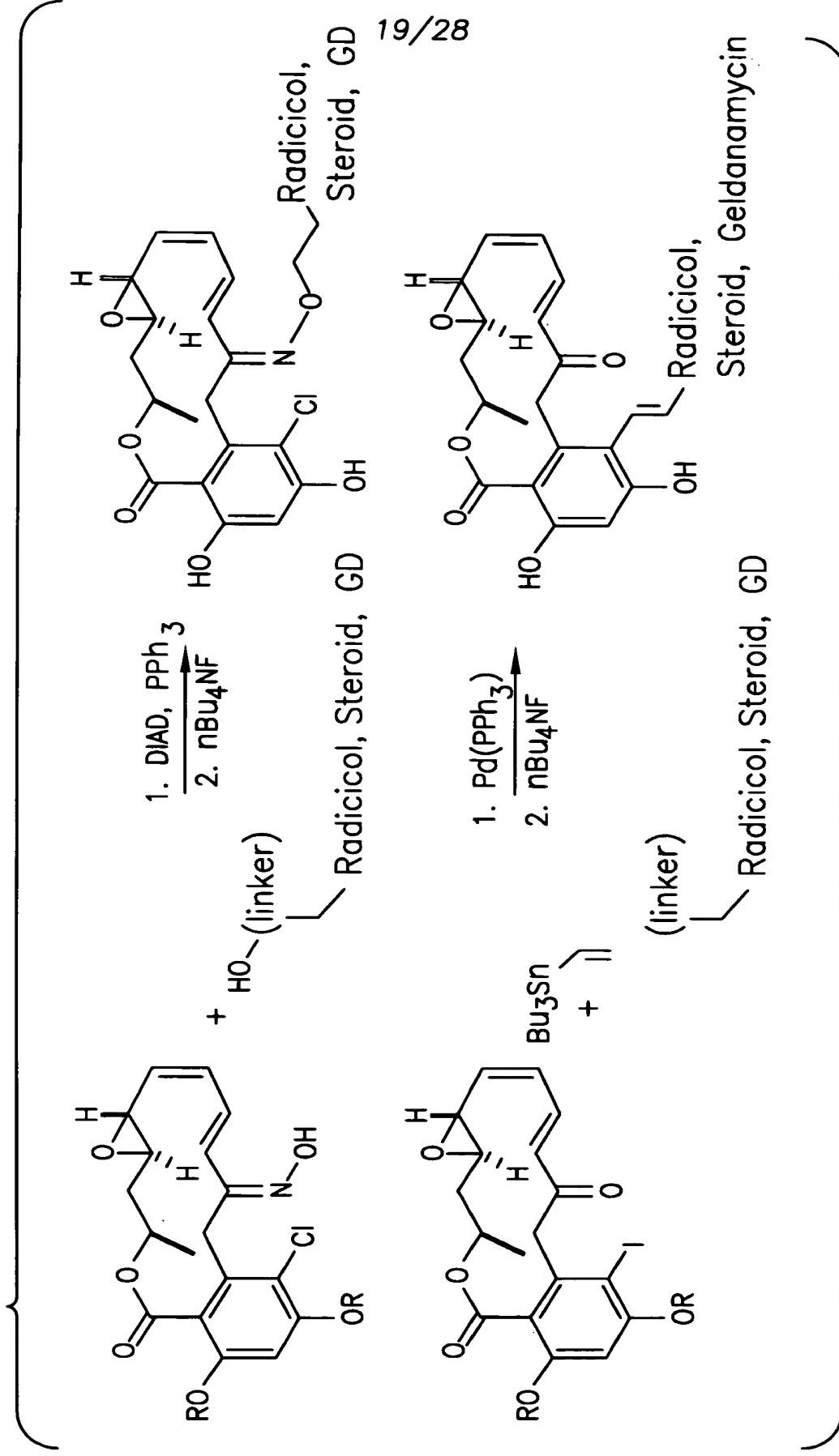


FIG. 16-2

FROM FIG. 16-1

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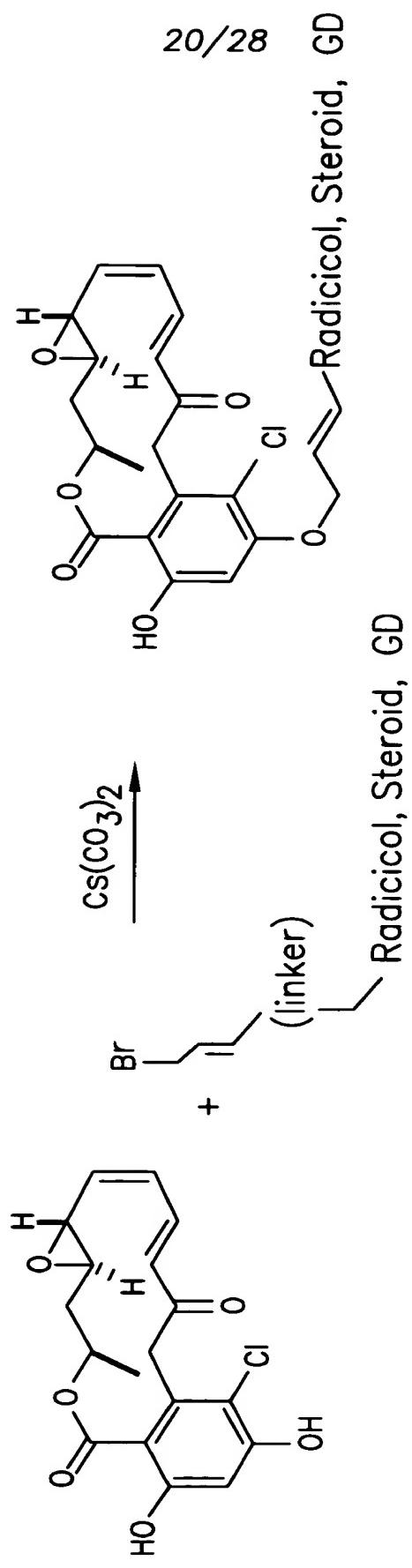
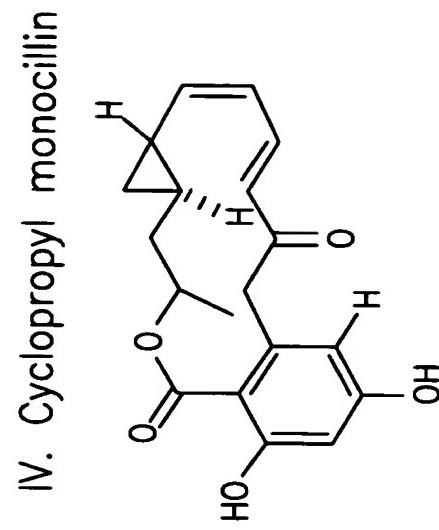
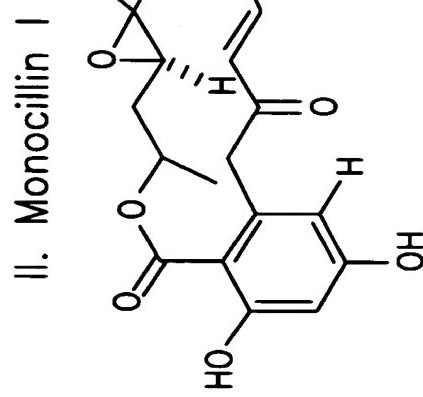
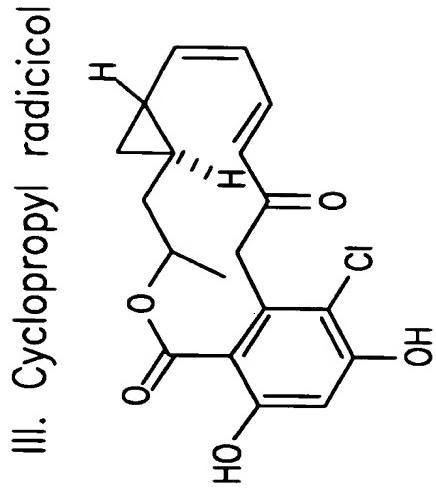
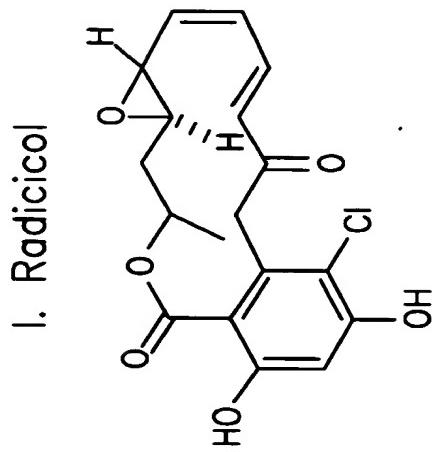


FIG. 17-1



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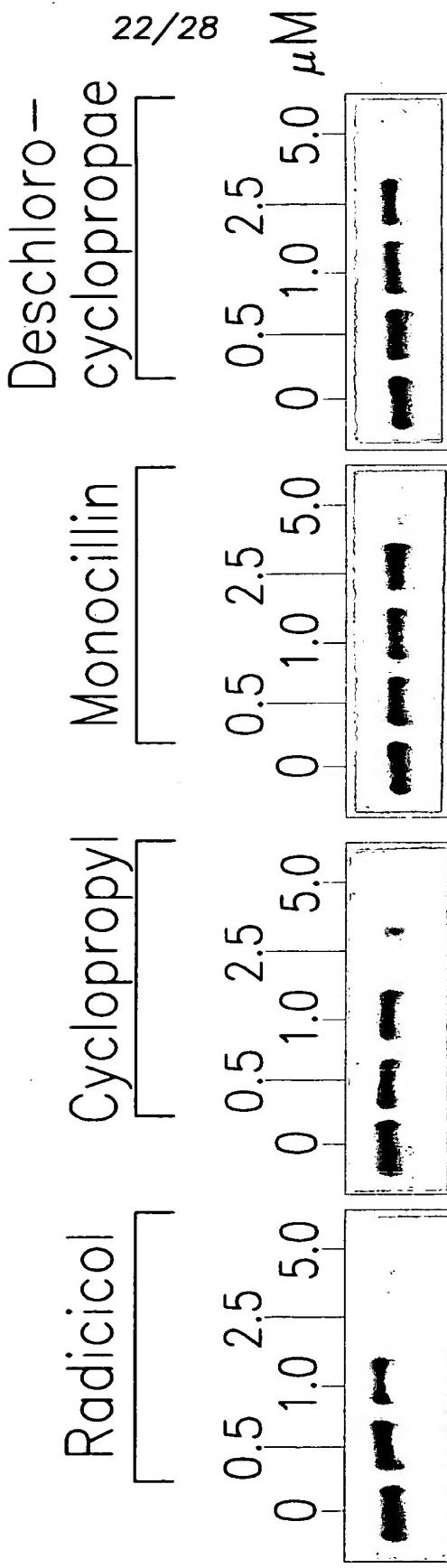
TO FIG. 17-2

20% CO_2 n H_2O NaHCO_3 CaCO_3

FROM FIG. 17-1

FIG. 17-2

MCF7 Cells Treated with Radicicol and Analogues



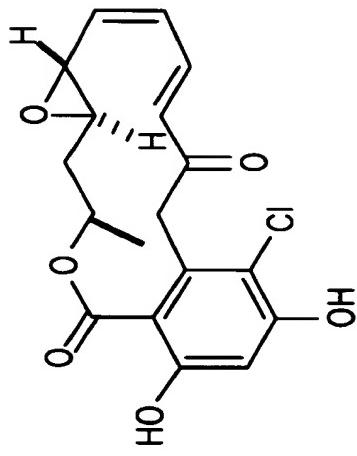
HER2

TO FIG. 17-3

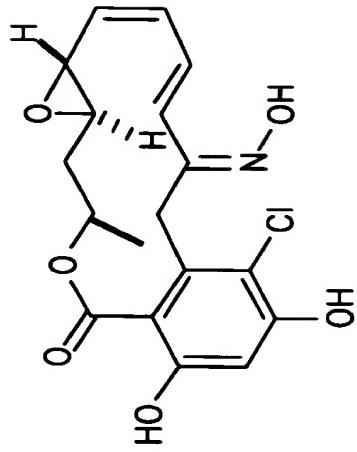
FIG. 17-3

FROM FIG. 17-2

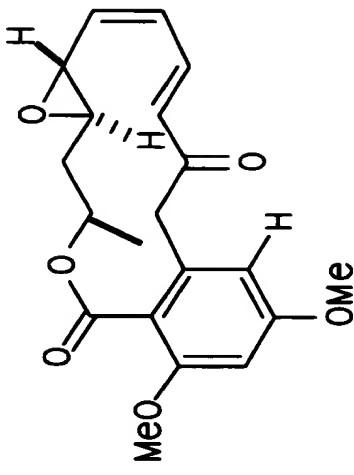
I. Radicicol



VII. Radicicol Oxime



V. Dimethyl Monocillin I



VI. Dimethyl Radicicol

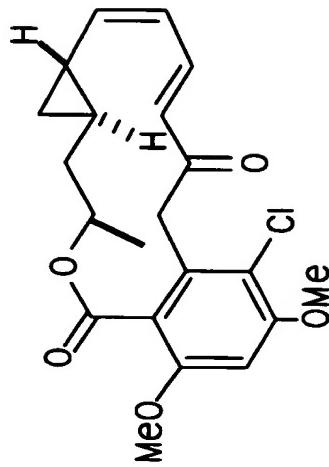
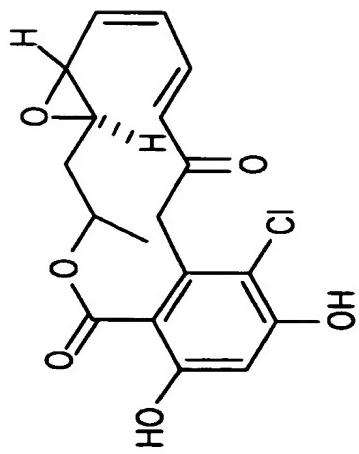
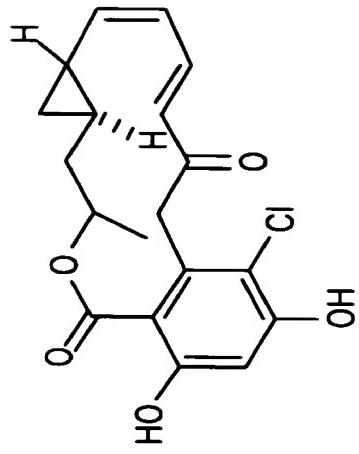


FIG. 18-1

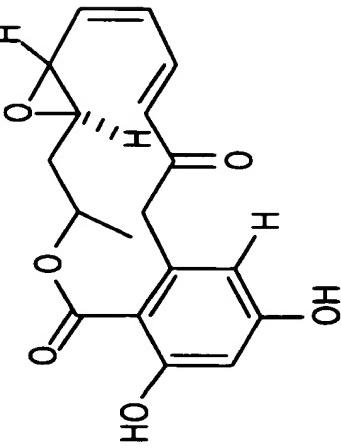
I. Radicicol



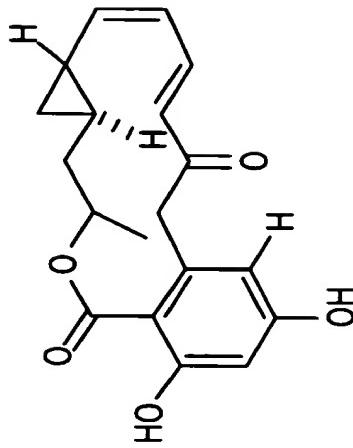
III. Cyclopropyl radicicol



II. Monocillin I



IV. Cyclopropyl monocillin



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TO FIG. 18-2

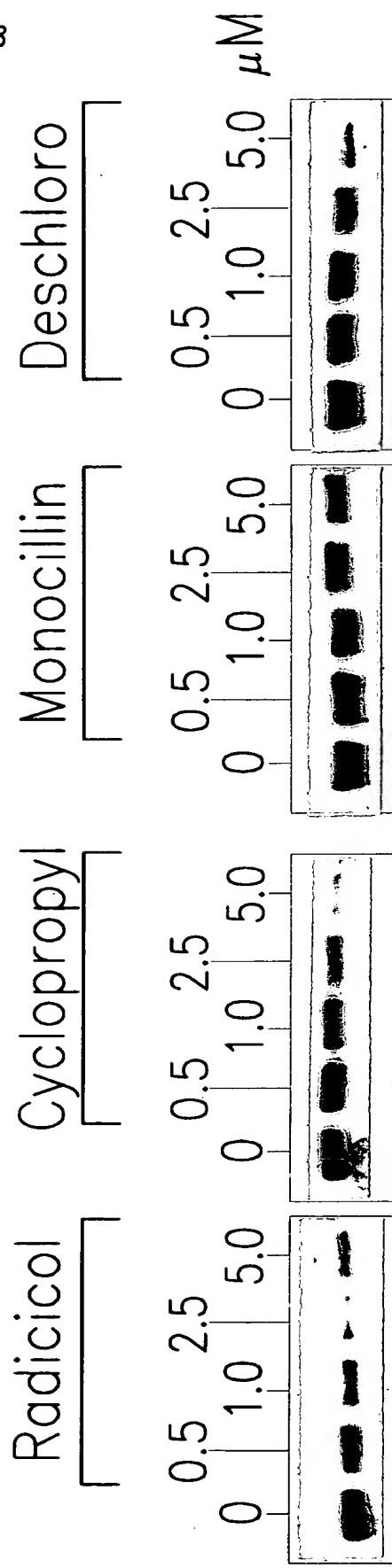
ପ୍ରକାଶକ ପତ୍ର ପରିଚୟ

FROM FIG. 18-1

FIG. 18-2

BT474 Cells Treated with Novel Radicicols (24hrs.)

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HER2

FIG. 19

Growth of MCF7 Treated with Radicicol and Derivatives of Radicicol

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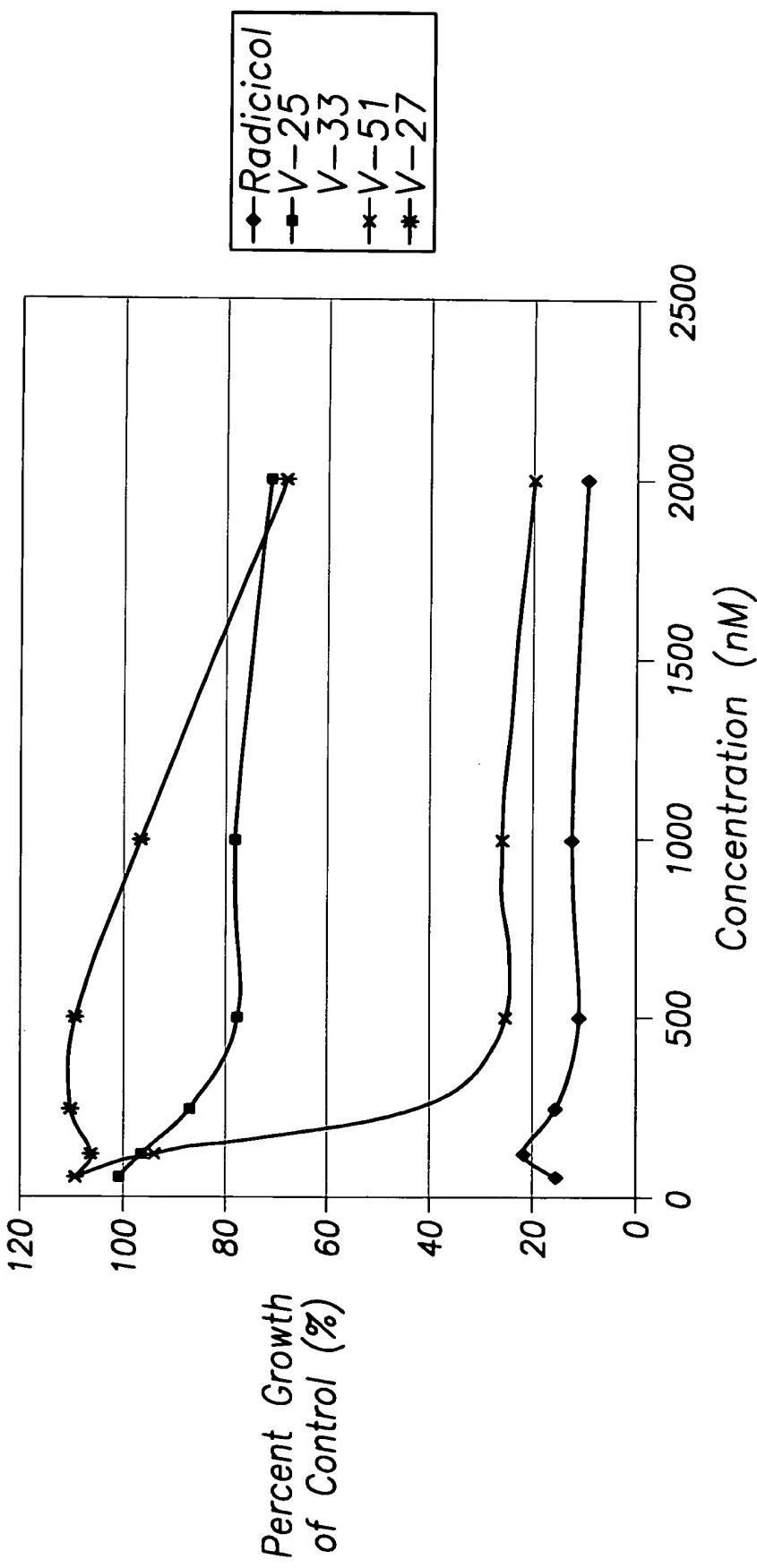


FIG. 20

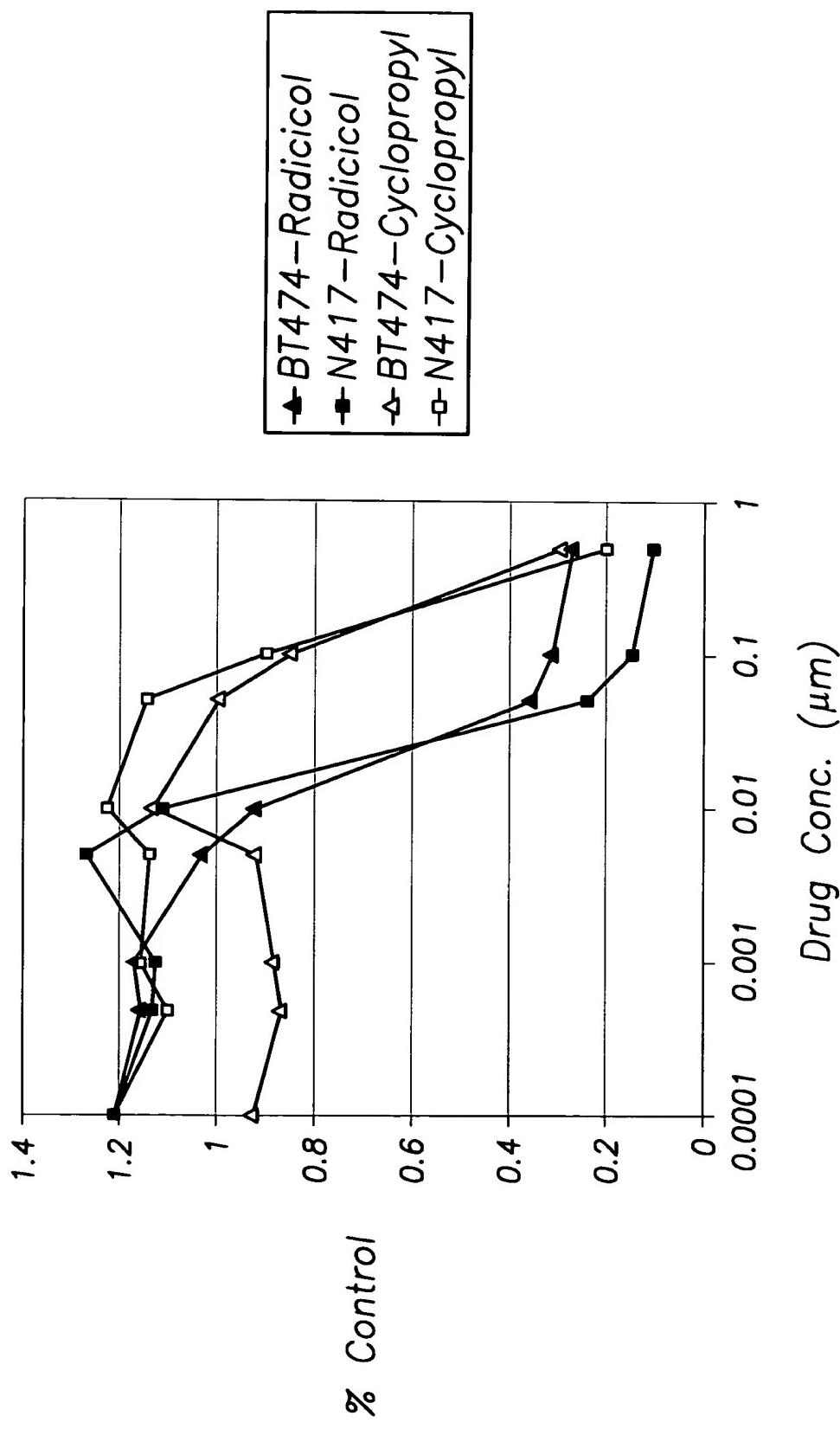


FIG. 21

